

Notice of Allowability

Application No.

10/751,067

Examiner

Jeffrey Sharp

Applicant(s)

CHEN, TED

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/28/2005.
2. ☒ The allowed claim(s) is/are 6-8.
3. ☒ The drawings filed on 1/05/2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in the Remarks section filed by Applicant on 28 April 2005.

The application has been amended as follows (clean version):

Replace the body of claim 6 with the following:

A combining device capable of being embedded into an object comprising:

an embedding unit having an axis, a first end to be embedded into said object, and a second end having a means for elastic buckling which permits a radial displacement of said second end;

a tubular hollow coupling unit having an inner surface and an enlarged internal diameter portion which forms a channel;

and a sliding sleeve for surrounding the second end of the embedding unit to reduce friction between the embedding unit and the hollow coupling unit as the second end of the embedding unit is received in the hollow coupling unit;

wherein in assembly, an axial load is applied to the second end of the embedding unit causing the means for elastic buckling to communicate with the channel of the hollow coupling unit; the embedding unit is tightly engaged with the hollow coupling unit; and the first end is axially received in the embedded object so that the object bears said axial load;

Art Unit: 3677

wherein a middle section of the sliding sleeve has a plurality of longitudinal outwardly bowed strips; the sliding sleeve is made of metal and is slightly elastic for encasing the second end; and the strips are convex and configured to facilitate insertion of the embedding unit into the hollow coupling unit;

wherein an outer surface of the first end of the embedding unit is formed with a plurality of tapered rings; each tapered ring has an annular flange portion extending radially outwardly, a cylindrical portion concentric with said axis, and an annular tapered surface extending from said annular surface to the outer surface of the first end such that the tapered rings generally converge toward the object;

wherein in joining the embedding unit and object, an external surface of each tapered ring is adapted to tightly engage the object for providing a reactive force to support the object.

Replace the body of claim 7 with the following:

The combining device capable of being embedded into an object as claimed in claim 6, wherein said means for elastic buckling on said second end comprises biforked elastic buckling posts, which are diametrically opposed; a front end of each buckling post has a hook so that when the embedding unit is inserted into the hollow coupling unit, the hooks of the buckling posts buckle into the channel of the hollow coupling unit.

Replace the body of claim 8 with the following:

The combining device capable of being embedded into an object as claimed in claim 6, wherein said means for elastic buckling on said second end comprises four elastic buckling posts, which are circumferentially arranged; a front end of each buckling post has a hook so that when the embedding unit is inserted into the hollow coupling unit, the hooks of the buckling posts buckle into the channel of the hollow coupling unit.

Enclosed with this Office action is an appended marked-up copy of the amendment showing all changes. This amendment addresses issues of indefiniteness under 35 U.S.C. 112 2d paragraph, and clarifies Applicant's invention consistent with the instant disclosure.

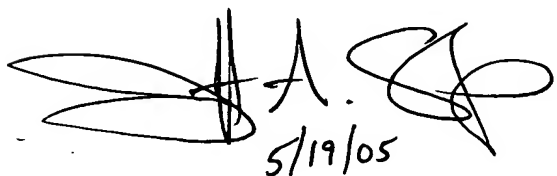
Art Unit: 3677

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Sharp whose telephone number is (571) 272-7074. The examiner can normally be reached on 5:30 am - 4:00 pm Mon-Thurs..

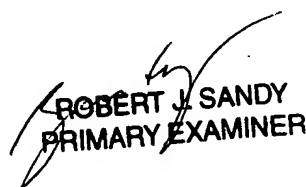
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on (571) 272-7075. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAS



5/19/05



ROBERT J. SANDY
PRIMARY EXAMINER

Claim 6 (As amended by Examiner)

A combining device capable of being embedded into an ~~embedded~~ object comprising:

an embedding unit having an axis, a first end to be embedded into an ~~embedded~~ said object, and a second end having ~~an elastic buckling means~~ a means for elastic buckling which permits a radial displacement of said second end;

a tubular hollow coupling unit having an inner surface and an enlarged internal diameter portion which is ~~formed as~~ forms a channel;

and a sliding sleeve for ~~enclosing~~ surrounding the second end of the embedding unit to reduce the friction ~~force~~ between the embedding unit and the hollow coupling unit as the second end of the embedding unit is received in the hollow coupling unit;

wherein in assembly, an axial load is applied to the second end of the embedding unit ~~is combined with a load and then the elastic buckling means is inserted into~~ causing the means for elastic buckling to communicate with the channel of the hollow coupling unit; ~~so that the embedding unit is tightly engaged with the hollow coupling unit;~~ and the first end is axially received in the embedded object so that the ~~embedded object bearing bears the weight of the~~ said axial load;

wherein a middle section of the sliding sleeve has a plurality of longitudinal ~~outer~~ cambered outwardly bowed strips; the sliding sleeve is made of metal and is slightly elastic for ~~enclosing~~ encasing the elastic buckling means ~~second end;~~ and the strips are ~~concave outwards so that when the embedding unit inserts~~ convex and configured to facilitate insertion of the embedding unit into the hollow coupling unit;

wherein an outer surface of the first end of the embedding unit is formed with a plurality of tapered rings; each tapered ring has a ~~plane~~ annular flange portion ~~vertical to the outer surface of the first end~~ extending radially outwardly, an annular surface parallel towards a bottom thereof ~~a cylindrical portion concentric with said axis, and an annular tapered surface extending from the said annular surface to the outer surface of the first end;~~ a narrow part of the tapered ring is further away from the second end than the bottom thereof such that the tapered rings generally converge toward the object;

wherein in ~~combining~~joining the embedding unit and object, ~~the annular~~an external surface of each tapered ring is adapted to tightly engages-to-engage the ~~embedded~~ object for providing a reactive force to support ~~an heavy~~the object.

Claim 7 (As amended by Examiner)

The combining device capable of being embedded into an object as claimed in claim 6, wherein ~~the said means for elastic buckling on said~~ second end comprises ~~a~~ bifurked elastic buckling posts, which are ~~arranged oppositely~~diametrically opposed; a front end of each buckling post has a hook; ~~so that~~ when the embedding unit is inserted into the hollow coupling unit, the hooks of the buckling posts ~~will be~~ buckled ~~in~~buckle into the channel of the hollow coupling unit.

Claim 8 (As amended by Examiner)

The combining device capable of being embedded into an object as claimed in claim 6, wherein ~~the said means for elastic buckling on said~~ second end ~~is formed by~~comprises four elastic buckling posts, which are circumferentially ~~arranged oppositely~~; a front end of each buckling post has a hook; ~~so that~~ when the embedding unit is inserted into the hollow coupling unit, the hooks of the buckling posts ~~will be~~ buckled ~~in~~buckle into the channel of the hollow coupling unit.